

US EPA ARCHIVE DOCUMENT

136

Shaughnessy Number: 128857

Date out of EAB: SEP 27 1988

hope

To: Lois Rossi/Larry Schnaubelt
Product Manager 21
Registration Division (TS 767C)

From: Emil Regelman, Supervisory Chemist
Environmental Fate Review Section #2
Environmental Fate and Ground Water Branch
Environmental Fate and Effects Division (TS 769C)

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Thru: Paul F. Schuda, Chief
Environmental Fate and Ground Water Branch/EFED (TS 769C)

Paul F. Schuda

Attached, please find the EAB review of...

Reg./File #: 707-ERN, -ERR, -ERE, -EER, -ROG, -ERG

Chemical Name: Myclobutanil

Type Product: Fungicide

Company Name: Rohm and Haas

Purpose: response to EFGWB comments on terrestrial field dissipation on
parent and 1,2,4-triazole metabolite

Date Received: 9/13/88

Action Code: 111,111,111,111,126,126

Date Completed: _____

EAB #(s): 81017,-18,-19,-20,-21,-22

Monitoring Study Requested: _____

Total Reviewing Time: 2.0 days

Monitoring Study Volunteered: _____

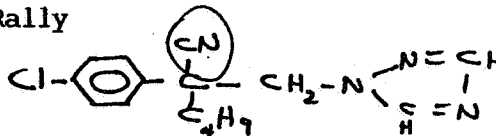
Deferrals to: Ecological Effects Branch

x Dietary Exposure Branch

x Toxicology Branch

1. CHEMICAL:

chemical name: [α-butyl-α(4-chlorophenyl)-1H-1,2-triazole-1-propanenitrile
common name: Myclobutanil
trade name: Systhane, Rally
structure:



CAS #: 66871-89-0
Shaulhnessy #: 128857

2. TEST MATERIAL: n.a.

3. STUDY/ACTION TYPE: request for EUP

4. STUDY IDENTIFICATION: n.a.

5. REVIEWED BY:

Typed Name: E. Brinson Conerly
Title: Chemist, Review Section 2
Organization: EFGWB/EFED/OPP

E.B. Conerly 11/10/89

6. APPROVED BY:

Typed Name: Emil Regelman
Title: Supervisory Chemist, Review Section 2
Organization: EFGWB/EFED/OPP

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7. CONCLUSIONS:

EFGWB concurs with granting this EUP. The data base is very nearly complete for full registration, with the exceptions noted below. [See Background section and EBC review of 9/27/88.] The EUP protocol does not propose to generate any environmental fate data.

8. RECOMMENDATIONS:

The applicant may wish to perform a portion of the previously requested field dissipation study during this EUP.

9. BACKGROUND:

The proposed EUP is for the following purposes:

- 1) to study efficacy of a new formulation type
- 2) to establish use parameters (optimum application rates, timing, and number)
- 3) to gather residue data

Approximately 288 stone-fruit (apricot, cherry, nectarine, peach, plum, and prune) grower trials, at an average plot size of 2.5 acres, are proposed, to take place from January 1989 to October 1990. This represents a total of 720 acres. The maximum annual usage will be 1008 lb active ingredient (2016 lb over the entire experiment). Sites are proposed in 19 states: AK, CA, GA, ID, LA, MD, MI, NC, NJ, NY, OR, PA, SC, TX, UT, VA, WA, WI, and WV. Application would not exceed 1.4 lb/season (with multiple applications), and would occur from pre-bloom to within 14 days of harvest. A petition for temporary tolerance at 2 ppm has been submitted concurrently.

The EUP is to be done on a product contained in water-soluble pouches. The pouches, representing four percent of the formulation, would decrease the exposure of mixers to the active ingredient, and would not be likely to affect its environmental behavior.

The status of data requirements is as follows:

- hydrolysis -- satisfied -- stable at pHs 5, 7, 9 ✓
- photolysis in water -- satisfied -- stable to photolysis in water ✓
- photolysis in soil -- satisfied -- extrapolated t_{1/2} ca. 143 days ✓
- aerobic soil metabolism -- satisfied -- t_{1/2} 61-71 days -- major product ✓
is 1,2,4-triazole up to ca 15%, with CO₂ and unextractables in lesser amounts
- anaerobic soil metabolism -- satisfied -- resistant to anaerobic metabolism -- no detectable degradation after ca. 60 days ✓
- leaching - satisfied for parent -- moderately mobile -- k_{as} 1.46 - 9.77 ✓
for adsorption, 0.47-4.18 for desorption in five soils: clay loam, sand, silt loam, sandy loam, clay -- additional data required re "aged" compound (degradates must be identified and quantified)
- * terrestrial field dissipation -- a new field dissipation study has been requested by EFCMB as a condition for registration
- fish bioaccumulation -- waived, based on low k_{ow}s for parent and degradates. The compound is not expected to bioaccumulate.

10. DISCUSSION OF INDIVIDUAL TESTS OR STUDIES: n.a.

11. COMPLETION OF ONE-LINER:

No additional environmental fate data was provided in this submittal.

12. CBI APPENDIX: n.a.